

1 CLAIMS

2 I claim:

3 1. An isolated polynucleotide molecule encoding a heavy chain variable
4 domain of antibody B2G4, said polynucleotide molecule comprising nucleotides 1 to 378
5 of SEQ ID NO:8.

6 2. An isolated polynucleotide molecule encoding a light chain variable
7 domain of antibody B2G4, said polynucleotide molecule comprising nucleotides 1 to 372
8 of SEQ ID NO:9.

9 3. An isolated polynucleotide molecule encoding an antibody-binding
10 fragment, said antibody-binding fragment comprising at least one heavy chain variable
11 domain encoded by the polynucleotide set forth in SEQ ID NO:8 and at least one light
12 chain variable domain encoded by the polynucleotide set forth in SEQ ID NO:9.

13 4. The isolated polynucleotide molecule according to claim 3, wherein said
14 antibody-binding fragment is an scFV fragment.

15 5. The isolated polynucleotide molecule according to claim 3, wherein said
16 antibody-binding fragment is a diabody.

17 6. The isolated polynucleotide molecule according to claim 3, wherein the
18 antibody-binding fragment is a triabody.

19 7. An antibody or antibody-binding fragment, wherein said heavy chain
20 comprises an amino acid sequence having at least 95% sequence identity to an amino
21 acid sequence encoded by nucleotides 1 to 378 of SEQ ID NO:8, and wherein said
22 antibody or antibody-binding fragment specifically binds the peptide of SEQ ID NO:4.

1 8. The antibody or antibody-binding fragment of claim 7, wherein said heavy
2 chain comprises an amino acid sequence encoded by nucleotides 1 to 378 of
3 SEQ ID NO:8, and wherein said antibody or antibody-binding fragment specifically
4 binds the peptide of SEQ ID NO:4.

5 9. An antibody or antibody-binding fragment, wherein said light chain
6 comprises an amino acid sequence having at least 95% sequence identity to an amino
7 acid sequence encoded by nucleotides 1 to 372 of SEQ ID NO:9, and wherein said
8 antibody or antibody-binding fragment specifically binds the peptide of SEQ ID NO:4.

9 10. The antibody or antibody-binding fragment of claim 9, wherein said light
10 chain comprises an amino acid sequence encoded by nucleotides 1 to 372 of
11 SEQ ID NO:9, and wherein said antibody or antibody-binding fragment specifically
12 binds the peptide of SEQ ID NO:4.

13 11. An antibody or antibody-binding fragment comprising at least one heavy
14 chain and at least one light chain, wherein said heavy chain comprises an amino acid
15 sequence having at least 95% sequence identity to an amino acid sequence encoded by
16 nucleotides 1 to 378 of SEQ ID NO:8, and wherein said light chain comprises an amino
17 acid sequence having at least 95% sequence identity to an amino acid sequence encoded
18 by nucleotides 1 to 372 of SEQ ID NO:9, and wherein said antibody or antibody-binding
19 fragment specifically binds the peptide of SEQ ID NO:4.

20 12. The antibody or antibody-binding fragment of claim 11, wherein said
21 heavy chain comprises an amino acid sequence encoded by nucleotides 1 to 378 of
22 SEQ ID NO:8, and wherein said light chain comprises an amino acid sequence encoded

1 by nucleotides 1 to 372 of SEQ ID NO:9, and wherein said antibody or antibody-binding
2 fragment specifically binds the peptide of SEQ ID NO:4.

3 13. The antibody or antibody-binding fragment according to claim 7, wherein
4 said antibody-binding fragment is an scFV fragment.

5 14. The antibody or antibody-binding fragment according to claim 9, wherein
6 said antibody-binding fragment is an scFV fragment.

7 15. The antibody or antibody-binding fragment according to claim 11,
8 wherein said antibody-binding fragment is an scFV fragment.

9 16. The antibody or antibody-binding fragment according to claim 11,
10 wherein said antibody-binding fragment is a diabody.

11 17. The antibody or antibody-binding fragment according to claim 11,
12 wherein the antibody-binding fragment is a triabody..

13 18. A pharmaceutical composition comprising the antibody or antibody-
14 binding fragment of claim 7, and a pharmaceutically acceptable carrier.

15 19. A pharmaceutical composition comprising the antibody or antibody-
16 binding fragment of claim 9, and a pharmaceutically acceptable carrier.

17 20. A pharmaceutical composition comprising the antibody or antibody-
18 binding fragment of claim 11, and a pharmaceutically acceptable carrier.